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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/696,553

10/30/2003

John Murtagh

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EXAMINER

FARAGALLA, MICHAEL A

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/696,553	<b>Applicant(s)</b> MURTAGH ET AL.	
	<b>Examiner</b> MICHAEL FARAGALLA	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, and 8-14 are rejected under 35 U.S.C. 102(e) as being unpatentable over **Marin et al (Patent number: US 6,298,232)**.

Consider Claim 1, Marin et al show a mobile network node (read as GSM HLR) comprising means for interfacing with an entity of a local network (A) (see figures 5 and 11) the node is located and with an entity of a foreign network (B) having a non compatible protocol for communication of short messages between the networks (see figures 5 and 11; paragraph 8, lines 20-35); (the mobile network node is read as GSM HLR; further the GSM HLR is located within a foreign network (GSM network) which

interfaces with local network (A) (read as IS-4 characterized i1 based network). The two networks have different protocols (thus non-compatible), characterized in that: The node comprises a pseudo network element operating with the protocol of the foreign network and comprising means for communicating with an actual element of the foreign network (see figures 5 and 11; paragraph 8, lines 20-35); (the pseudo network element is read as the GSM HLR which operates in the GSM network (foreign network)).

Consider Claims 8, and 12, Marin et al show a mobile network node as well as a method for delivery of a short message from a foreign mobile network to a user or application server in a home mobile network, the foreign network operating with a different protocol from that of the home network, the method comprising the steps of:

- (a) An SMSC (read as SC/GMSC) of the foreign network routing the message to a pseudo HLR in the home network, the pseudo HLR operating with the protocol of the foreign network (see figures 5 and 11; paragraph 8, lines 20-35); (the mobile network node is read as GSM HLR; further the GSM HLR is located within a foreign network (GSM network) which interfaces with local network (A) (read as IS-4 characterized i1 based network)).
- (b) Routing the message to a pseudo MSC in the home network, the pseudo MSC operating with the protocol of the foreign network (see figures 5 and 11); (the MSC is shown to be part of the MSC/VLR which communicates with the foreign network, therefore operating at a protocol that allows it to communicate with the foreign network).

(c) Routing the message to an SMSC of the home network using an SMSC access protocol (see figure 5; read as VMSC).

(d) The home network SMSC routing the message to the destination user or application server (see abstract); (the SMS is then forwarded to mobile users).

Consider Claim 2, Marin et al show the mobile network node as claimed in claim 1, wherein the pseudo network element is a pseudo HLR (see figure 5; read as GSM/HLR).

Consider Claim 3, Marin et al show the mobile network node as claimed in claim 2, wherein the node further comprises a pseudo MSC operating with the protocol of the foreign network and being connected to the pseudo HLR (see figure 11); (the MSC is shown to be part of the MSC/VLR which communicates with the foreign network).

Consider Claims 4 and 10, Marin et al show the mobile network node as claimed in claim 1, as well as the mobile network node as claimed in claim 8, wherein the node comprises means for interfacing with a short message interworking gateway in the home network for bi-directional transfer of short messages (see figure 5; column 8, lines 20-35); (the SMS message is transmitted between the two different networks by forwarding the SM directly by the SC/GMSC).

Consider Claim 5, Marin et al show the mobile network node as claimed in claim 4, wherein said interfacing means comprises a pseudo SMSC operating with the protocol of the foreign network (figure 5; read as SC/SMSC).

Consider Claim 6, Marin et al show the mobile network node as claimed in claim 1, wherein the pseudo network element comprises means for communicating with the foreign network actual element via a signaling network (see column 8, lines 20-40).

Consider Claim 9, Marin et al show the mobile network node as claimed in claim 8, wherein the pseudo MSC comprises means for terminating the message vis a vis the foreign network (figure 5); (read as SMS ACK message).

Consider Claim 11, Marin et al show the mobile network node as claimed in claim 10, wherein said interfacing means comprises an SMSC operating with the protocol of the foreign network (see figure 5; GSM network is read as the foreign network).

Consider Claims 13 and 14, Marin et al show the method as claimed in claim 12, wherein the message is routed to the home network SMSC by a pseudo SMSC located in the home network and operating with the protocol of the foreign network, and wherein the pseudo SMSC transmits the message to an interworking gateway, which performs protocol conversion and routes the message to the home network SMSC (see figure 5;

column 8, lines 20-35); (the SMS message is transmitted between the two different networks by forwarding the SM directly by the SC/GMSC).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Marin et al (Patent number: US 6,298,232)** in view of **Forslow (Patent number: US: 6,608,832)**.

Consider Claim 7, Marin et al show the mobile network node as claimed in claim 6, but fail to specifically show that the signaling network is an SS7 network.

However, in related art, Forslow et al show that the signaling network is an SS7 network (see figure 2).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Forslow into the teaching of Marin et al in order to process SMS over circuit switched networks (see figure 2).

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) HELANDER ET AL (US 6,735,187).

(2) LE ET AL (US 6,230,005).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL FARAGALLA whose telephone number is (571)270-1107. The examiner can normally be reached on Mon-Fri 7:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/Michael Faragalla/  
Examiner, Art Unit 2617

05/08/2008